

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

On the Commissioner's Own Motion for a Determination of the Adequacy of Warning Devices at Eight Grade Crossings of the Wisconsin Central Ltd. Tracks in the Village of Kronenwetter and City of Mosinee, Marathon County

9164-RX-512

FINDINGS OF FACT AND ORDER

The Commissioner of Railroads directed the staff of the Office of the Commissioner of Railroads (OCR) to investigate the adequacy of warning devices under §195.28, Stats., at eight grade crossings of the Wisconsin Central Ltd. (WCL) tracks in the Village of Kronenwetter and City of Mosinee, Marathon County. This order only addresses **Maple Ridge Road** (crossing no. 392 786Y / VY 79.97).

An OCR investigator inspected the crossings in August 2005. No hearing was held.

Findings of Fact

THE COMMISSIONER FINDS:

Maple Ridge Road Crossing no. 392 786Y / VY 79.97

Maple Ridge Road is about 28' wide in the vicinity of the crossing and intersects the railroad tracks at an angle of 90°. The roadway approaches to the crossing are essentially level. Maple Ridge intersects Old US 51 less than 75' east of the crossing. Maple Ridge Road is controlled by a stop sign at that intersection. Maple Ridge Road carried an estimated average daily traffic (ADT) of 150 at a legal speed limit of 25 mph. Based on the development that has occurred in the area this estimate is too low.

The WCL operates 8 train movements per day over the crossing at a timetable speed of 40 mph. The crossing consists of one mainline track.

At all crossings, except those with gates, a driver stopped 15' short of the near rail must be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving their vehicle safely across the tracks to a point 15' past the far rail, prior to the arrival of a train. Required clearing sight distance along both directions of the track, from the stopped position of the vehicle, is dependent upon the maximum train speed and the acceleration characteristics of the "design" vehicle. The necessary clearing sight distance at the Maple Ridge Road crossing is 895'. The available clearing sight distance is more than 895'.

The exposure factor at this crossing is 1200 (assuming 150 ADT). The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

One train-vehicle accident has occurred at this crossing since 1973. The accident occurred in 1991.

Accidents that do occur here will likely be quite serious if a through train is involved due to their 40 mph speed. Train speed is strongly correlated with fatalities in train/vehicle accidents. More specifically, crossings with train speeds of 40 mph and over have a disproportionate number of fatalities. According

to Federal Railroad Administration (FRA) statistics, nationally, in 1994 71% of fatalities occurred at crossings with train speeds of 40 mph+, even though only 26% of all crossings had train speeds of 40 mph+.

Maple Ridge Road serves both industrial and commercial uses as well as an expanding residential area that includes a new private school. Semi-trucks use the crossing particularly to access the Mosinee Cold Storage facility. When these trucks stop at the Old US 51 intersection they extend over the tracks. Installing automatic flashing lights and gates will not remedy this deficiency – only the relocation of the intersection or the tracks would do so and neither is feasible. However, installing automatic flashing lights and gates will provide substantially improved safety for all users of the crossing, including semi-trucks.

The crossing is presently protected with reflective crossbucks and stop signs. The existing warning devices are inadequate. The existing warning devices will be adequate until such time as the new warning devices are installed. In order to adequately protect public safety 12" LED automatic flashing lights with gates and constant warning time circuitry are needed.

Constant warning time circuitry adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

Light emitting diodes (LED) lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

Source of funding for Maple Ridge Road: The signal materials and installation shall be paid from OCR safety funds.

Conclusion on the Issue

THE COMMISSIONER CONCLUDES:

That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates and constant warning time circuitry at the crossing of the tracks of Wisconsin Central Ltd. with Maple Ridge Road in the City of Mosinee, Marathon County.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §195.28, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the **Wisconsin Central Ltd.** shall install and maintain 12" LED automatic flashing lights with gates, and constant warning time circuitry with appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **Maple Ridge Road** at-grade in the City of Mosinee, Marathon County by **December 31, 2007** (crossing no. 392 786Y / VY 79.97).
2. That the **Wisconsin Central Ltd.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.
3. That the signal installation work herein ordered shall not begin until the district office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.
4. That for the **Maple Ridge Road** crossing the **Wisconsin Central Ltd.** shall bear no part of the cost of the crossing signals installation, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.
5. That if the petitioner, railroad or any interested party objects to this order and requests a hearing within 20 days of the date of this order in writing, the Office will hold a public hearing.
6. That jurisdiction is retained.

Dated at Madison, Wisconsin, (November 17, 2005).

By the Office of the Commissioner of Railroads.

Rodney W. Kreunen
Commissioner of Railroads

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